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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,717

10/28/2005

Masayuki Kumazawa

MAT-8771US

9478

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EXAMINER

RUTKOWSKI, JEFFREY M

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/554,717	Applicant(s) KUMAZAWA ET AL.	
	Examiner JEFFREY M. RUTKOWSKI	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/28/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1-22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. The step of periodically multicasting packets found in independent **claims 1-2 and 8-9** is indefinite because it is not clear if the identifier included in the packet is an identifier that defines the packet type or is an identifier that identifies a particular node.
5. **Claim 13** is indefinite because it is unclear if all or only some of the conditions recited are required to be met.
6. **Claims 1 and 3-7** also lack antecedent basis for “the transferring step” found in the last limitation of **claim 1**.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 1 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaggan et al. (US Pg Pub 2005/0025179), hereinafter referred to as McLaggan, in view of Li et al. (US Pat 5,473,599), hereinafter referred to as Li.

10. For **claims 1 and 8**, McLaggan discloses a method and apparatus for performing the distribution and balancing of traffic flows in a virtual gateway [title]. Each gateway device **212,216**, which are routers [figure 1B], use traffic threshold information (conditions determined in advance) to determine whether or not received packets, received from hosts **222,224,226** (a node in the same segment) should be transmitted by the current selected gateway device to an outside network **150** (another segment) [0051-0052, figure 2]. A gateway device can redirect traffic in real-time via Hello messages [0054]. Address Resolution Protocol (ARP) replies are used as redirect messages to allow the optimum gateway to be used by hosts **222,224,226** for future packet transmissions [0055].

11. McLaggan discloses Hello messages are transmitted periodically after a data collector **250** polling interval [0043]. The Hello messages used by McLaggan's invention appear to be unicast messages. Therefore, McLaggan does not disclose the use periodic multicast transmissions. Li discloses a virtual gateway protocol where Hello messages are transmitted via

multicast addresses and includes, inter alia, source address information (an identifier) [**col. 10 line 60 to col. 11 line 10**]. It would have been obvious to a person of ordinary skill in the art to use multicast Hello messages instead of unicast Hello messages in McLaggan's invention to conserve bandwidth by using a single message, instead of multiple unicast messages, to send router information.

12. The combination of McLaggan and Li disclose multicast Hello packets are that are used to distribute information regarding a particular router's traffic usage. The information included in the Hello packets allows a router to select the best router to send the information [**McLaggan, 0052**].

13. For **claims 3 and 10**, McLaggan does not disclose the use of multicasting Hello packets. Li discloses multicasting Hello packets that include the source address of the sender (identifier of that router) [**col. 10 line 60 to col. 11 line 10**]. It would have been obvious to a person of ordinary skill in the art to use multicast Hello messages instead of unicast Hello messages in McLaggan's invention to conserve bandwidth by using a single message, instead of multiple unicast messages, to send router information.

14. For **claims 5 and 12**, McLaggan does not disclose a router election scheme. Li discloses a router election process (order for selection) where a standby router is elected when a router is removed from the segment [**col. 9 lines 18-25**]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a standby router election scheme in McLaggan's invention to provide fail-over mechanism at the gateway.

15. For **claim 13**, McLaggan discloses a condition that includes percentage utilization of the router on a per load basis (congestion state in the router) [**0051-0052, table 2**].

Allowable Subject Matter

16. **Claims 2 and 9** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

17. **Claims 4, 6-7 and 14-22** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY M. RUTKOWSKI whose telephone number is (571)270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Patent Examiner
06/30/2008

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Supervisory Patent Examiner, Art Unit 2619